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10/561,419	12/19/2005	Yoshiaki Nakanishi	38951	6543

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EXAMINER	
NGUYEN, TRONG H	
ART UNIT	PAPER NUMBER
4148	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/561,419	NAKANISHI, YOSHIAKI	
	Examiner	Art Unit	
	TRONG NGUYEN	4148	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-36* is/are rejected.

7)☒ Claim(s) *8,10,23 and 30* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 December 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/19/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The instant application numbered 10561419 filed on 12/19/2005 is presented for examination by the examiner.

Oath/Declaration

2. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in **37 C.F.R. 1.63**.

Priority

3. As required by M.P.E.P. 201.14(c), acknowledgement is made of applicant's claim for priority based on application filed on July 23, 2003 (JP 2003-278344).

4. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

5. The applicant's submitted drawings are acceptable for examination purposes.

Information Disclosure Statement

6. The information disclosure statement (IDS) submitted on 12/19/2005 is in compliance with the provisions of 37 C.R.R. 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Specification

7. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

8. The abstract of the disclosure is objected to because the abstract exceeds the maximum 150 word limit and includes the legal phraseology of "means" and "means for" as well as reference numerals. Correction is required. See MPEP § 608.01(b).

9. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Smart card and user terminal.

Claim Objections

10. Claims **8, 10, 23**, and **30** are objected to because of the following informalities: Claims **8**, **10**, **23**, and **30** recite "the disclosure information supervision means" in lines 18, 4, 3, and 3 respectively which appears to be referred to "the disclosure information supervision unit" and thus is inconsistent. Appropriate correction is required.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

12. Claim **9** is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim **9** recites "an information processing apparatus for performing communication through a second communication unit with an information storage device" in lines 1-4 and "the second communication unit performing communication in a contactless manner" in lines 5-7. However, it was not described in the specification on how the information processing apparatus communicates with the information storage device in a contactless manner.

13. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims **4**, **17**, and **20** recite "disclosable information" in lines 4. It is unclear as to what the applicant meant by this term. Therefore, for examining purposes, hereinafter "disclosable information" will be considered as disclosure information.

Claims **4**, **17**, and **20** recite "the result" in lines 4. There is insufficient antecedent basis for this limitation in these claims.

Claims **14, 27,** and **34** recite "the information" in lines 8, 7, and 7 respectively. There is insufficient antecedent basis for this limitation in these claims. Furthermore, it is not clear as to what the applicant meant by this term. For examining purposes, hereinafter "the information" will be considered as "the category."

Claim **7** recites "An information processing apparatus for performing communication through a second communication unit with an information storage device including a first communication unit and the second communication unit" in lines 1-5. It is unclear whether the applicant meant an information processing apparatus which includes a first communication unit and a second communication unit and it communicates with an information storage device through the second communication unit or an information processing apparatus which includes an information storage device and this information storage device has a first and a second communication unit and the information processing apparatus communicates through the second communication unit of the information storage device. For examining purposes, hereinafter the former interpretation will be used.

Claim **8** recites "An information processing apparatus for performing communication through a second communication unit with an information storage device including a first communication unit performing communication in a contactless manner and the second communication unit performing communication in a contact manner" in lines 1-7. It is unclear whether the applicant meant an information

processing apparatus which includes a first communication unit and a second communication unit and it communicates with an information storage device through the second communication unit or an information processing apparatus which includes an information storage device and this information storage device has a first and a second communication unit and the information processing apparatus communicates through the second communication unit of the information storage device. For examining purposes, hereinafter the former interpretation will be used.

Claim **9** recites "An information processing apparatus for performing communication through a second communication unit with an information storage device including a first communication unit performing communication in a contact manner and the second communication unit performing communication in a contactless manner" in lines 1-7. It is unclear whether the applicant meant an information processing apparatus which includes a first communication unit and a second communication unit and it communicates with an information storage device through the second communication unit or an information processing apparatus which includes an information storage device and this information storage device has a first and a second communication unit and the information processing apparatus communicates through the second communication unit of the information storage device. For examining purposes, hereinafter the former interpretation will be used.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims **1** and **17-19** are rejected under 35 U.S.C. 102(b) as being anticipated by Mitsumoto US 2002/0177407 (hereinafter "Mitsumoto").

Regarding claim **1**, Mitsumoto discloses "**An information storage device comprising**:" as [IC card 30 (Fig. 3)] "**a first communication unit**;" as [non-contact type I/F section 32 and/or IC card antenna 31 (Fig. 3)] "**a second communication unit**;" as [contact type I/F section 38 and/or contact 33 (Fig. 3)] "**a control unit which performs processes in accordance with commands received from the first communication unit and the second communication unit**;" as [CPU 34 performs control of data communication with the portable telephone set (which communicates through the second communication unit) and with the external system (which communicates through the first communication unit) (Col. 3, Par. 0037, lines 1-4)] "**an information storage unit which stores disclosure information to be disclosed through the second communication unit**;" as [nonvolatile memory 35a stores data of electronic ticket, service point and the like (Fig. 3, Col. 3, Par. 0037, lines 7-9)] "**and an information disclosure unit which refers to the information storage unit in accordance with an inquiry from the second communication unit**," as [CPU 34 reads service point from the nonvolatile memory 35a and outputs this data to the

contact type IC card reader/writer 23 in response to a request from the contact type IC card reader/writer 23 coming from the contact 33, the contact type I/F section 38 (second communication unit) and the bus 39 (Col. 5, Par. 0069, lines 6-9 and Par. 0070, lines 1-5)] "**wherein the control unit stores disclosure information indicating a result of a process performed through the first communication unit in the information storage unit**," as [CPU 34 stores the service point data 120 input into the non-contact type I/F section 32 via the IC card antenna 31(first communication unit) into the nonvolatile memory 35a (Col. 4, Par. 0065, lines 6-9 and Col. 5, Par. 0066, lines 1-2)] "**and wherein the information disclosure unit refers to the information storage unit in response to an inquiry from the second communication unit, and discloses the disclosure information when the disclosure information has been stored**" as [the contact type IC card reader/writer 23 of the portable phone set 10 issues the request to the CPU 34 via the contact 22, the contact 33, the contact type I/F section 38 (second communication unit) and the bus 39. In response, the CPU 34 reads service point data from the nonvolatile memory 35a and outputs this data to the contact type IC card reader/writer 23 (Col. 5, Par 0069, lines 6-9 and Par 0070, lines 1-5).]

Regarding claim **17**, Mitsumoto discloses "**The information storage device according to claim 1, wherein the control unit performs control so that disclosable information of the result of the process performed through the first communication unit is contained in the disclosure information**" as [A CPU 34 controls each part, and performs control of data communication with the portable

telephone set 10 and with the external system and memory access control (Col. 3, Par. 0037, lines 1-4). Furthermore, CPU 34 stores the service point data 120 input into the non-contact type I/F section 32 via the IC card antenna 31(first communication unit) into the nonvolatile memory 35a (Col. 4, Par. 0065, lines 6-9 and Col. 5, Par. 0066, lines 1-2).]

Regarding claim **18**, Mitsumoto discloses "**The information storage device according to claim 1, wherein the control unit exchanges an encryption key in advance with equipment to which the disclosure information should be disclosed through the second communication unit, encrypts the disclosure information with the encryption key, and stores the encrypted disclosure information in the information storage unit**" as [With respect to this limitation, Mitsumoto discloses an encryption processing section 37 performs encryption and decryption of communication data between the IC card 30 and the portable telephone set 10 (or external system) (Col. 3, Par. 0038, lines 3-6). By disclosing encrypting and decrypting communication data, Mitsumoto also discloses an encryption key being exchanged in advance and encrypted data (encrypted disclosure information) being stored.]

Regarding claim **19**, Mitsumoto discloses "**The information storage device according to claim 1, wherein the information disclosure unit gives a response to the inquiry from the second communication unit without performing any authentication process**" as [CPU 34 reads service point from the nonvolatile memory 35a and outputs this data to the contact type IC card reader/writer 23 in response to a request from the contact type IC card reader/writer 23 coming from the contact 33, the

contact type I/F section 38 (second communication unit) and the bus 39 (Col. 5, Par. 0069, lines 6-9 and Par. 0070, lines 1-5).]

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

17. Claims **7** and **24-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitsumoto.

Regarding claim **7**, Mistumoto discloses "**An information processing apparatus**" as [portable telephone set 10 (Fig. 2)] "**for performing communication through a second communication unit with an information storage device**" as [contact type IC card reader/writer 23 and/or contact 22 (second communication unit) reads and writes data from/to the IC card 30 (Col. 2, Par. 0034, lines 1-3)] "**including a first communication unit**" as [radio I/F section 19 and/or antenna 12 (Fig. 2)] "**and the second communication unit**," as [contact type IC card reader/writer 23 and/or contact 22 (Fig. 2)] "**the information processing apparatus comprising: disclosure information supervision unit which supervises disclosure information indicating a result of a first process through the second communication unit**," as [CPU 13 controls each part, and performs control of data communication, interface control with the IC card 30, memory access control and the like (Col. 3, Par. 0030, lines 5-7)] "**the**

first process being performed through the first communication unit by the information storage device," as [With respect to this limitation, Mitsumoto discloses CPU 34 (of information storage device) reads service point data from the nonvolatile memory 35a and outputs this data to the contact type IC card reader/writer 23 (second communication unit) (Col. 5, Par. 0070, lines 1-5). Mitsumoto does not specifically disclose the IC card performs the above process through the first communication unit of the portable telephone set. However, the concept and advantage of contactless communication between an IC card and a terminal is well known and expected in the art at the time of the invention. For example, Saitoh in US 5,929,414 discloses a contact/non-contact IC card and a contact/non-contact IC card reader-writer for contact and contactless communication (Saitoh, Col. 1, lines 9-15). It would have been obvious to a person of ordinary skill in the art at the time of the invention to include this well known concept if desired since non-contact system prevents the IC card chip from being damaged by static electricity and imperfect contact (Saitoh, Col. 1, lines 59-61)] "**wherein the information processing apparatus performs a second process when the disclosure information supervision unit acquires the disclosure information from the information storage device**" as [this service point data is transmitted (second process) under control of the CPU 13 to the service point server 130 as service point data 140 (Col. 5, Par. 0070, lines 5-7) after receiving the service point data from the information storage device (Col. 5, Par. 0070, lines 1-4).]

Regarding claim **24**, Mitsumoto discloses "**The information processing apparatus according to claim 7, wherein, as the second process, the information**

processing apparatus displays the disclosure information acquired from the information storage device" as [With respect to this limitation, Mitsumoto discloses a display 21 is provided on the surface 11a and displays a conversation state, a state of data communication and the like (Col. 2, Par. 0033, lines 4-6).]

Regarding claim **25**, Mitsumoto discloses "**The information processing apparatus according to claim 7, wherein the information processing apparatus exchanges an encryption key in advance with the information storage device, acquires the disclosure information encrypted from the information storage device, and decrypts the encrypted disclosure information with the encryption key**" as [With respect to this limitation, Mitsumoto discloses an encryption processing section 37 performs encryption and decryption of communication data between the IC card 30 and the portable telephone set 10 (or external system) (Col. 3, Par. 0038, lines 3-6). By disclosing encrypting and decrypting communication data, Mitsumoto also discloses an encryption key being exchanged in advance.]

18. Claims **2-6, 8-9, 11-16, 20-22, 26-29,** and **31-36** are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitsumoto in view of Ausems et al. US 6,434,403 (hereinafter "Ausems").

Regarding claim **2**, Mitsumoto discloses "**An information storage device comprising**:" as [IC card 30 (Fig. 3)] "**a first communication unit which performs communication in a contactless manner**;" as [non-contact type I/F section 32 and/or IC card antenna 31 (Fig. 3)] "**a second communication unit which performs**

communication in a contact manner;" as [contact type I/F section 38 and/or contact 33 (Fig. 3)] "**a control unit which performs processes in accordance with commands received from the first communication unit and the second communication unit;**" as [CPU 34 performs control of data communication with the portable telephone set (which communicates through the second communication unit) and with the external system (which communicates through the first communication unit) (Col. 3, Par. 0037, lines 1-4)] "**an information storage unit which stores disclosure information to be disclosed through the second communication unit;**" as [nonvolatile memory 35a stores data of electronic ticket, service point and the like (Fig. 3, Col. 3, Par. 0037, lines 7-9)] "**and an information disclosure unit which refers to the information storage unit in accordance with an inquiry from the second communication unit,**" as [CPU 34 reads service point from the nonvolatile memory 35a and outputs this data to the contact type IC card reader/writer 23 in response to a request from the contact type IC card reader/writer 23 coming from the contact 33, the contact type I/F section 38 (second communication unit) and the bus 39 (Col. 5, Par. 0069, lines 6-9 and Par. 0070, lines 1-5)] "**wherein the control unit stores the disclosure information in the information storage unit when a process performed through the first communication unit has been terminated,**" as [CPU 34 stores the service point data 120 input into the non-contact type I/F section 32 via the IC card antenna 31(first communication unit) into the nonvolatile memory 35a (Col. 4, Par. 0065, lines 6-9 and Col. 5, Par. 0066, lines 1-2)] "**and wherein the information disclosure unit refers to the information storage unit in response to an inquiry**

from the second communication unit, and discloses the disclosure information when the disclosure information has been stored" as [the contact type IC card reader/writer 23 of the portable phone set 10 issues the request to the CPU 34 via the contact 22, the contact 33, the contact type I/F section 38 (second communication unit) and the bus 39. In response, the CPU 34 reads service point data from the nonvolatile memory 35a and outputs this data to the contact type IC card reader/writer 23 (Col. 5, Par 0069, lines 6-9 and Par 0070, lines 1-5)].

Mitsumoto does not specifically disclose **"wherein the control unit generates disclosure information."**

However, Ausems discloses a smart card engine generating disclosure information (card account information along with a user identification number) which will be transmitted to a sale terminal, by extracting and attaching the card account information and the user identification number from the smart card's memory system (Col. 6, lines 37-40).

Ausems and Mitsumoto are analogous because they are in the same field of endeavor of smart card's usage in portable devices.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Mitsumoto's portable telephone set and IC card by having the IC card generates disclosure information as described by Ausems as it would provide the portable telephone with card account information and user identification information to update a financial accounting record of the user's personal or business finances (Ausems, Col. 6, lines 49-50).

Regarding claim **3**, Mitsumoto discloses "**An information storage device comprising:**" as [IC card 30 (Fig. 3)] "**a first communication unit which performs communication in a contact manner;**" as [contact type I/F section 38 and/or contact 33 (Fig. 3)] "**a second communication unit which performing communication in a contactless manner;**" as [non-contact type I/F section 32 and/or IC card antenna 31 (Fig. 3)] "**a control unit which performs processes in accordance with commands received from the first communication unit and the second communication unit;**" as [CPU 34 performs control of data communication with the portable telephone set (which communicates through the first communication unit) and with the external system (which communicates through the second communication unit) (Col. 3, Par. 0037, lines 1-4)] "**an information storage unit which stores disclosure information to be disclosed through the second communication unit;**" as [nonvolatile memory 35a stores data of electronic ticket, service point and the like (Fig. 3, Col. 3, Par. 0037, lines 7-9)] "**and an information disclosure unit which refers to the information storage unit in accordance with an inquiry from the second communication unit,**" as [CPU 34 reads the electronic ticket data from the nonvolatile memory 35a and outputs this data to the non-contact type I/F section 32 in response to a request from the non-contact type IC card reader/writer 83 coming from the IC card antenna 31, non-contact type I/F section 32 (second communication unit) and the bus 39 (Col. 4, Par. 0051, lines 3-8)] "**wherein the control unit stores the disclosure information in the information storage unit when a process performed through the first communication unit has been terminated,**" as [CPU 34 stores the electronic ticket

data 60 input into the contact type I/F section 38 via the IC contact 33 (first communication unit) into the nonvolatile memory 35a (Col. 3, Par. 0049, lines 1-3)] "**and wherein the information disclosure unit refers to the information storage unit in response to an inquiry from the second communication unit, and discloses the disclosure information when the disclosure information has been stored**" as [CPU 34 reads the electronic ticket data from the nonvolatile memory 35a and outputs this data to the non-contact type I/F section 32 in response to a request from the non-contact type IC card reader/writer 83 coming from the IC card antenna 31, non-contact type I/F section 32 (second communication unit) and the bus 39 (Col. 4, Par. 0051, lines 3-8)]

Mitsumoto does not specifically disclose "**wherein the control unit generates disclosure information.**"

However, Ausems discloses a smart card engine generating disclosure information (card account information along with a user identification number) which will be transmitted to a sale terminal, by extracting and attaching the card account information and the user identification number from the smart card's memory system (Col. 6, lines 37-40).

Ausems and Mitsumoto are analogous because they are in the same field of endeavor of smart card's usage in portable devices.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Mitsumoto's portable telephone set and IC card by having the IC card generates disclosure information as described by Ausems as it would provide the

sale terminal with card account information and user identification information to complete a purchase and provide the user with a receipt (Ausems, Col. 6, lines 40-42).

Regarding claim **4**, Mitsumoto in view of Ausems disclose "**The information storage device according to claim 3, wherein the control unit performs control so that disclosable information of the result of the process performed through the first communication unit is contained in the disclosure information**" as [A CPU 34 controls each part, and performs control of data communication with the portable telephone set 10 and with the external system and memory access control (Mitsumoto, Col. 3, Par. 0037, lines 1-4). Furthermore, the CPU 34 stores the electronic ticket data 60 input into the contact type I/F section 38 (first communication unit) into the nonvolatile memory 35a via the bus 39 (Mitsumoto, Col. 3, Par. 0049, lines 1-3).]

Regarding claim **5**, Mitsumoto in view of Ausems disclose "**The information storage device according to claim 3, wherein the control unit exchanges an encryption key in advance with equipment to which the disclosure information should be disclosed through the second communication unit, encrypts the disclosure information with the encryption key, and stores the encrypted disclosure information in the information storage unit**" as [With respect to this limitation, by disclosing an encryption processing section 37 performs encryption and decryption of communication data between the IC card 30 and the portable telephone set 10 (or external system) (Mitsumoto, Col. 3, Par. 0038, lines 3-6), Mitsumoto also discloses an encryption key being exchanged in advance and encrypted data (encrypted disclosure information) being stored in memory 35a.]

Regarding claim **6**, Mitsumoto in view of Ausems disclose "**The information storage device according to claim 3, wherein the information disclosure unit gives a response to the inquiry from the second communication unit without performing any authentication process**" as [Without any authentication process, CPU 34 reads the electronic ticket data from the nonvolatile memory 35a and outputs this data to the non-contact type I/F section 32 in response to a request from the non-contact type IC card reader/writer 83 coming from the IC card antenna 31, non-contact type I/F section 32 (second communication unit) and the bus 39 (Mitsumoto, Col. 4, Par. 0051, lines 3-8).]

Regarding claim **8**, Mitsumoto discloses "**An information processing apparatus**" as [portable telephone set 10 (Fig. 2)] "**for performing communication through** a second communication unit **with an information storage device**" as [contact type IC card reader/writer 23 and/or contact 22 (second communication unit) reads and writes data from/to the IC card 30 (Col. 2, Par. 0034, lines 1-3)] "**including a first communication unit performing communication in a contactless manner**" as [radio I/F section 19 and/or antenna 12 (Fig. 2)] "**and the second communication unit performing communication in a contact manner**," as [contact type IC card reader/writer 23 and/or contact 22 (Fig. 2)] "**the information processing apparatus comprising: disclosure information supervision unit which supervises disclosure information through the second communication unit**," as [CPU 13 controls each part, and performs control of data communication, interface control with the IC card 30, memory access control and the like (Col. 3, Par. 0030, lines 5-7)] "**the first process**

being performed through the first communication unit by the information storage device," as [With respect to this limitation, Mitsumoto discloses CPU 34 (of information storage device) reads service point data from the nonvolatile memory 35a and outputs this data to the contact type IC card reader/writer 23 (second communication unit) (Col. 5, Par. 0070, lines 1-5). Furthermore, Mitsumoto also discloses a service terminal communicates with an IC card in a contactless manner through a non-contact type IC card reader/writer, a radio I/F section and an antenna (Fig. 6, Col. 4, Par. 0061, lines 6-7). Therefore, Mitsumoto makes it obvious for the IC card to perform the above process through the first communication unit if there is a desire to do so] "**wherein the information processing apparatus performs a second process in cooperation with the first process when the disclosure information supervision means acquires the disclosure information from the information storage device**" as [this service point data is transmitted (second process) under control of the CPU 13 to the service point server 130 as service point data 140 (Col. 5, Par. 0070, lines 5-7) after receiving the service point data from the IC card (Col. 5, Par. 0070, lines 1-4).]

Mitsumoto does not specifically disclose "**the disclosure information being generated by the information storage device when a first process is terminated**."

However, Ausems discloses a smart card engine generating disclosure information (card account information along with a user identification number) which will be transmitted to a sale terminal, by extracting and attaching the card account information and the user identification number from the smart card's memory system (Col. 6, lines 37-40).

Ausems and Mitsumoto are analogous because they are in the same field of endeavor of smart card's usage in portable devices.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Mitsumoto's portable telephone set and IC card by having the IC card generates disclosure information as described by Ausems as it would provide the portable telephone with card account information and user identification information to initiate a purchase with a sale terminal (Ausems, Col. 6, lines 37-42).

Regarding claim **9**, Mitsumoto discloses "**An information processing apparatus**" as [portable telephone set 10 (Fig. 2)] "**for performing communication through a second communication unit with an information storage device**" as [With respect to this limitation, Mitsumoto discloses a radio I/F section 19 and antenna 12 for contactless communication with a service terminal (Fig. 2). Furthermore, Mitsumoto also discloses a service terminal communicates with an IC card in a contactless manner through a non-contact type IC card reader/writer, a radio I/F section and an antenna (Fig. 6, Col. 4, Par. 0061, lines 6-7). Thus, Mitsumoto makes it obvious for the portable telephone to communicate with the IC card through a contactless communication unit (second communication unit) if there is a desire to do so] "**including a first communication unit performing communication in a contact manner**" as [contact type IC card reader/writer 23 and/or contact 22 (first communication unit) reads and writes data from/to the IC card 30 (Col. 2, Par. 0034, lines 1-3)] "**and the second communication unit performing communication in a contactless manner**," as [see above] "**the information processing apparatus**

comprising: disclosure information supervision unit which supervises disclosure information through the second communication unit," as [CPU 13 controls each part, and performs control of data communication, interface control with the IC card 30, memory access control and the like (Col. 3, Par. 0030, lines 5-7)] "**the first process being performed through the first communication unit by the information storage device,**" as [CPU 34 (of information storage device) reads the service point data from the nonvolatile memory 35a and outputs this data to the contact type IC card reader/writer 23 (first communication unit) via the bus 39, the contact type I/F section 38, the contact 33 and the contact 22 (Col. 5, Par. 0070, lines 1-5)] "**wherein the information processing apparatus performs a second process in cooperation with the first process when the disclosure information supervision unit acquires the disclosure information from the information storage device**" as [this service point data is transmitted (second process) under control of the CPU 13 (of information processing apparatus) to the service point server 130 as service point data 140 (Col. 5, Par. 0070, lines 5-7)]

Mitsumoto does not specifically disclose "**the disclosure information being generated by the information storage device when a first process is terminated**."

However, Ausems discloses a smart card engine generating disclosure information (card account information along with a user identification number) which will be transmitted to a sale terminal, by extracting and attaching the card account information and the user identification number from the smart card's memory system (Col. 6, lines 37-40).

Ausems and Mitsumoto are analogous because they are in the same field of endeavor of smart card's usage in portable devices.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Mitsumoto's portable telephone set and IC card by having the IC card generates disclosure information as described by Ausems as it would provide the portable telephone with card account information and user identification information to initiate a purchase with a sale terminal (Ausems, Col. 6, lines 37-42).

Regarding claim **11**, Mitsumoto in view of Ausems disclose "**The information processing apparatus according to claim 9, wherein, as the second process, the information processing apparatus displays the disclosure information acquired from the information storage device**" as [With respect to this limitation, by disclosing a display 21 is provided on the surface 11a and displays a conversation state, a state of data communication and the like (Mitsumoto, Col. 2, Par. 0033, lines 4-6), Mitsumoto also discloses the service point data acquired from the IC card being displayed.]

Regarding claim **12**, Mitsumoto in view of Ausems disclose "**The information processing apparatus according to claim 9, wherein the information processing apparatus exchanges an encryption key in advance with the information storage device, acquires the disclosure information encrypted from the information storage device, and decrypts the encrypted disclosure information with the encryption key**" as [With respect to this limitation, by disclosing an encryption processing section 37 performs encryption and decryption of data in communication data between the IC card 30 and the portable telephone set 10 (or external system)

(Mitsumoto, Col. 3, Par. 0038, lines 3-6), Mitsumoto also discloses an encryption key being exchanged in advance.]

Regarding claim **13**, Mitsumoto in view of Ausems disclose "**The information processing apparatus according to claim 9, wherein, as the second process, the information processing apparatus activates a terminal function specified from an identifier designated explicitly in the disclosure information acquired from the information storage device**" as [With respect to this limitation, Ausems discloses a sale terminal extracting and generating information such as charged amount, merchant ID, etc. based on the card account information and user identification number specified in the disclosure information acquired from the smart card engine (Ausems, Col. 6, lines 37-42).]

Regarding claim **14**, Mitsumoto in view of Ausems disclose "**The information processing apparatus according to claim 9, wherein, as the second process, the information processing apparatus identifies a category of the disclosure information acquired from the information storage device and activates a terminal function fitted to the information**" as [With respect to this limitation, Ausems discloses a sale terminal identifies category of the disclosure information acquired from the smart card engine based on the card account information and user identification number, extracts and generates purchase information specific to the user identification number such as charged amount, merchant ID, etc. (Ausems, Col. 6, lines 37-42).]

Regarding claim **15**, Mitsumoto in view of Ausems disclose "**The information processing apparatus according to claim 13, wherein arguments to be used for**

activating the terminal function are contained in the disclosure information" as [With respect to this limitation, Ausems discloses a sale terminal extracts and generates purchase information using the card account information and user identification number contained in the disclosure information (Ausems, Col. 6, lines 37-42).]

Regarding claim **16**, Mitsumoto in view of Ausems disclose "**The information processing apparatus according to claim 14, wherein arguments to be used for activating the terminal function are contained in the disclosure information**" as [With respect to this limitation, Ausems discloses a sale terminal extracts and generates purchase information using the card account information and user identification number contained in the disclosure information (Ausems, Col. 6, lines 37-42).]

Regarding claim **20**, Mitsumoto in view of Ausems disclose "**The information storage device according to claim 2, wherein the control unit performs control so that disclosable information of the result of the process performed through the first communication unit is contained in the disclosure information**" as [A CPU 34 controls each part, and performs control of data communication with the portable telephone set 10 and with the external system and memory access control (Mitsumoto, Col. 3, Par. 0037, lines 1-4). Furthermore, CPU 34 stores the service point data 120 input into the non-contact type I/F section 32 via the IC card antenna 31(first communication unit) into the nonvolatile memory 35a (Mitsumoto, Col. 4, Par. 0065, lines 6-9 and Col. 5, Par. 0066, lines 1-2).]

Regarding claim **21**, Mitsumoto in view of Ausems disclose "**The information storage device according to claim 2, wherein the control unit exchanges an**

encryption key in advance with equipment to which the disclosure information should be disclosed through the second communication unit, encrypts the disclosure information with the encryption key, and stores the encrypted disclosure information in the information storage unit" as [With respect to this limitation, by disclosing an encryption processing section 37 performs encryption and decryption of communication data between the IC card 30 and the portable telephone set 10 (or external system) (Mitsumoto, Col. 3, Par. 0038, lines 3-6), Mitsumoto also discloses an encryption key being exchanged in advance and encrypted data (encrypted disclosure information) being stored.]

Regarding claim **22**, Mitsumoto in view of Ausems disclose "**The information storage device according to claim 2, wherein the information disclosure unit gives a response to the inquiry from the second communication unit without performing any authentication process**" as [Without any authentication process, CPU 34 reads service point from the nonvolatile memory 35a and outputs this data to the contact type IC card reader/writer 23 in response to a request from the contact type IC card reader/writer 23 coming from the contact 33, the contact type I/F section 38 (second communication unit) and the bus 39 (Mitsumoto, Col. 5, Par. 0069, lines 6-9 and Par. 0070, lines 1-5).]

Regarding claim **26**, Mitsumoto discloses **"The information processing apparatus according to claim 7**," but does not specifically disclose "**wherein, as the second process, the information processing apparatus activates a terminal**

function specified from an identifier designated explicitly in the disclosure information acquired from the information storage device."

However, Ausems discloses a sale terminal extracting and generating information such as charged amount, merchant ID, etc. based on the card account information and user identification number specified in the disclosure information acquired from the smart card engine (Col. 6, lines 37-42).

Ausems and Mitsumoto are analogous art because they are in the same field of endeavor of smart card's usage in portable devices.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Mitsumoto's portable telephone set and IC card by having the portable telephone activates a terminal function as described by Ausems as it would provide for the purpose of updating a financial accounting record of the user's personal or business finances (Ausems, Col. 6, lines 48-49).

Regarding claim **27**, Mitsumoto discloses "**The information processing apparatus according to claim 7,**" but does not specifically disclose "**wherein, as the second process, the information processing apparatus identifies a category of the disclosure information acquired from the information storage device and activates a terminal function fitted to the information.**"

However, Ausems discloses a sale terminal identifies category of the disclosure information acquired from the smart card engine based on the card account information and user identification number, extracts and generates information specific to the user identification number such as charged amount, merchant ID, etc. (Col. 6, lines 37-42).

Ausems and Mitsumoto are analogous art because they are in the same field of endeavor of smart card's usage in portable devices.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Mitsumoto's portable telephone set and IC card by having the portable telephone identifies and activates a terminal function as described by Ausems as it would provide for the purpose of updating a financial accounting record of the user's personal or business finances (Ausems, Col. 6, lines 48-49).

Regarding claim **28**, Mitsumoto in view of Ausems disclose "**The information processing apparatus according to claim 26, wherein arguments to be used for activating the terminal function are contained in the disclosure information**" as [With respect to this limitation, Ausems discloses a sale terminal extracts and generates purchase information using the card account information and user identification number contained in the disclosure information (Ausems, Col. 6, lines 37-42).]

Regarding claim **29**, Mitsumoto in view of Ausems disclose "**The information processing apparatus according to claim 27, wherein arguments to be used for activating the terminal function are contained in the disclosure information**" as [With respect to this limitation, Ausems discloses a sale terminal extracts and generates purchase information using the card account information and user identification number contained in the disclosure information (Ausems, Col. 6, lines 37-42).]

Regarding claim **31**, Mitsumoto in view of Ausems disclose "**The information processing apparatus according to claim 8, wherein, as the second process, the information processing apparatus displays the disclosure information acquired**

from the information storage device" as [With respect to this limitation, by disclosing a display 21 is provided on the surface 11a and displays a conversation state, a state of data communication and the like (Mitsumoto, Col. 2, Par. 0033, lines 4-6), Mitsumoto also discloses the service point data acquired from the IC card being displayed.]

Regarding claim **32**, Mitsumoto in view of Ausems disclose "**The information processing apparatus according to claim 8, wherein the information processing apparatus exchanges an encryption key in advance with the information storage device, acquires the disclosure information encrypted from the information storage device, and decrypts the encrypted disclosure information with the encryption key**" as [With respect to this limitation, by disclosing an encryption processing section 37 performs encryption and decryption of communication data between the IC card 30 and the portable telephone set 10 (or external system) (Mitsumoto, Col. 3, Par. 0038, lines 3-6), Mitsumoto also discloses an encryption key being exchanged in advance.]

Regarding claim **33**, Mitsumoto in view of Ausems disclose "**The information processing apparatus according to claim 8, wherein, as the second process, the information processing apparatus activates a terminal function specified from an identifier designated explicitly in the disclosure information acquired from the information storage device**" as [With respect to this limitation, Ausems discloses a sale terminal extracting and generating information such as charged amount, merchant ID, etc. based on the card account information and user identification number specified

in the disclosure information acquired from the smart card engine (Ausems, Col. 6, lines 37-42).]

Regarding claim **34**, Mitsumoto in view of Ausems disclose "**The information processing apparatus according to claim 8, wherein, as the second process, the information processing apparatus identifies a category of the disclosure information acquired from the information storage device and activates a terminal function fitted to the information**" as [With respect to this limitation, Ausems discloses a sale terminal identifies category of the disclosure information acquired from the smart card engine based on the card account information and user identification number, extracts and generates information specific to the user identification number such as charged amount, merchant ID, etc. (Ausems, Col. 6, lines 37-42).]

Regarding claim **35**, Mitsumoto in view of Ausems disclose "**The information processing apparatus according to claim 33, wherein arguments to be used for activating the terminal function are contained in the disclosure information**" as [With respect to this limitation, Ausems discloses a sale terminal extracts and generates purchase information using the card account information and user identification number contained in the disclosure information (Ausems, Col. 6, lines 37-42).]

Regarding claim **36**, Mitsumoto in view of Ausems disclose "**The information processing apparatus according to claim 34, wherein arguments to be used for activating the terminal function are contained in the disclosure information**" as [With respect to this limitation, Ausems discloses a sale terminal extracts and generates

purchase information using the card account information and user identification number contained in the disclosure information (Ausems, Col. 6, lines 37-42).]

19. Claims **10** and **30** are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitsumoto in view of Ausems, and further in view of Piikivi US 6,776,339 (hereinafter "Piikivi").

Regarding claim **10**, Mitsumoto in view of Ausems disclose "**The information processing apparatus according to claim 9**," but does not specifically disclose "**wherein the disclosure information supervision means repetitively performs polling on the information storage device engaging in execution of the first process, so as to supervise the disclosure information**."

However, Piikivi discloses a mobile terminal repeatedly asking whether a smart card needs any mobile terminal services (Col. 3, lines 50-52).

Piikivi, Mitsumoto, and Ausems are analogous art because they are in the same field of endeavor of smart card's usage in portable devices.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the portable telephone set and IC card of Mitsumoto in view of Ausems by including polling as described by Piikivi in order to provide services to the smart card instead of having the smart card generates an interrupt signal when it needs the portable telephone's service (Piikivi, Col. 3, lines 47-52).

Regarding claim **30**, Mitsumoto in view of Ausems disclose "**The information processing apparatus according to claim 8**," but does not specifically disclose

"**wherein the disclosure information supervision means repetitively performs polling on the information storage device engaging in execution of the first process, so as to supervise the disclosure information.**"

However, Piikivi discloses a mobile terminal repeatedly asking whether a smart card needs any mobile terminal services (Col. 3, lines 50-52).

Piikivi, Mitsumoto, and Ausems are analogous art because they are in the same field of endeavor of smart card's usage in portable devices.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the portable telephone set and IC card of Mitsumoto in view of Ausems by including polling as described by Piikivi in order to provide services to the smart card instead of having the smart card generates an interrupt signal when it needs the portable telephone's service (Piikivi, Col. 3, lines 47-52).

20. Claim **23** is rejected under 35 U.S.C. 103(a) as being unpatentable over Mitsumoto in view of Piikivi.

Mitsumoto discloses "**The information processing apparatus according to claim 7,**" but does not specifically disclose "**wherein the disclosure information supervision means repetitively performs polling on the information storage device engaging in execution of the first process, so as to supervise the disclosure information.**"

However, Piikivi discloses a mobile terminal repeatedly asking whether a smart card needs any mobile terminal services (Col. 3, lines 50-52).

Piikivi and Mitsumoto are analogous art because they are in the same field of endeavor of smart card's usage in portable devices.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the portable telephone set and IC card of Mitsumoto by including polling as described by Piikivi in order to provide services to the smart card instead of having the smart card generates an interrupt signal when it needs the portable telephone's service (Piikivi, Col. 3, lines 47-52).

Conclusion

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US 7,344,074

US 5,929,414

US 6,250,227

US 2002/0004762

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TRONG NGUYEN whose telephone number is (571)270-7312. The examiner can normally be reached on Monday through Thursday 7:30 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Pham can be reached on (571)272-3689. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TN

/THOMAS PHAM/
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